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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,826	12/02/2003	JeanThierry Simonnet	241891USOCONT	2739
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
MAEWALL, SNIGDEHA				
ART UNIT		PAPER NUMBER		
1612				
NOTIFICATION DATE		DELIVERY MODE		
05/29/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/724,826

Applicant(s)

SIMONNET ET AL.

Examiner

Snigdha Maewall

Art Unit

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-53 is/are pending in the application.
- 4a) Of the above claim(s) 44-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. Receipt of Applicants' amendments and remarks filed on 02/25/08 is acknowledged.

Status of the Claims

Claims 25-53 are pending in the application, with claims 44-53 having been withdrawn from consideration, in response to the Non-Final Rejection submitted on March 29, 2007. Claims 1-24 have been cancelled in a Preliminary Amendment filed on December 2, 2003. Accordingly, claims **25-43** are being examined on the merits herein.

The rejections made under Obviousness type double patenting are hereby withdrawn in view of applicant's arguments.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: it does not identify the citizenship of each inventor. The citizenship of each inventor is listed as "French". French is not a proper country. Appropriate correction is required.

Response to Arguments

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3. Applicant's arguments with respect to "Objection to Oath/Declaration" have been fully considered and are not found persuasive. Applicants have argued that "French citizenship properly identifies the inventors as being from France as was also the case in parent case issued as patent. This argument is not found persuasive because "French" is a language and not a country. Additionally each application is examined on its own merits. Thus the Objection to Oath/Declaration remains.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ribier et al. (US 5,753,241), in view of Tabibi et al. (US 5,130,122) and Kenji et al. (Journal of colloid and Interface science 236, 14-19 (2001) as evidenced by Nguyen et al. (US 6,669,849).

Ribier et al. teach an oil-in-water nanoemulsion, in which the oil globules are less than 100 nm, and contain an amphiphilic lipid component (abstract). The amount of oil ranges from 5 to 30% by weight with respect to the total weight of the emulsion (column 3, lines 16-18). The oil can be a silicone oil, namely decamethylcyclopentasiloxane, which has a molecular weight of 370.78 (column 3, line 47). The oil can also be Jojoba oil, which contains 36 to 46 carbons, and has a molecular weight of at least 432 (column

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5, example 1; and wikipedia.org). Jojoba oil makes up 50% of the oils having a molecular weight greater than 400 (column 5, example 1).

Furthermore, Ribier et al. teach ionic amphiphilic lipids in the nanoemulsions, which can be alkaline salts of dicetyl and dimyristyl phosphate, alkaline salts of cholesterol sulphate, alkaline salts of cholesterol phosphate, sodium salts of phosphatidic acid, phospholipids, or alkylsulfonic derivatives (columns 2, lines 57-65; and column 3, lines 1-3). The ionic amphiphilic lipids are from 2 to 10% by weight (column 3, line 13).

Ribier et al. also teach emulsions that contain additives to improve the transparency of the formulation, such as lower alcohols and are 5 to 20% by weight (column 3, lines 49-51, 53, and 62).

Ribier et al. also teach the nanoemulsion for topical use such as a cosmetic or dermatopharmaceutical composition and for use on the eyes (column 4, lines 45-49). Since the nanoemulsion of Ribier et al. is for ophthalmic use (e.g. use on the eyes), it would be obvious that such a nanoemulsion contains an ophthalmic vehicle.

Ribier et al. do not teach nanoemulsions containing the surfactants herein and the turbidity of the nanoemulsion.

Tabibi et al. teach a submicron emulsion of adsorptive oil that contains surfactants (column 6, lines 58-59 and 62). The adsorptive oil may be from vegetable oils, mineral oils, or animal oils (column 2, lines 33-35). The submicron emulsions are less than about 0.3 microns in diameter (column 4, lines 13-15).

Tabibi et al. do not specifically name surfactants however, it would be obvious that the surfactants of Tabibi et al. may include sucrose distearate as recited in claims 30 and 31 and other surfactants that are solids at a temperature of less than or equal to 45°C.

As evidenced by Nguyen et al., Nguyen et al. disclose a process for the removal of dissolved organic carbon from water (abstract). The organic carbon compounds in various water samples were coagulated, by addition of a coagulant, to form a floc, which can then be physically removed (column 1, lines 29-32). The turbidity of water samples where the floc size is 1-2 mm is 3.6 NTU (column 13, Table 2). Thus, the nanoemulsions of less than 100nm in the instant application are reasonably expected to have a turbidity measurement of 60 to 600 NTU as recited in instant claim 26.

Accordingly, absent the showing of unexpected results, it would have been obvious to a person of skill in the art at the time of the invention to employ the nanoemulsions of Ribier et al. to contain a surfactant because the submicron emulsions of Tabibi et al. contain a surfactant and according to Tabibi et al., submicron emulsions or nanoemulsions contain a surfactant.

The motivation to combine the nanoemulsion of Ribier et al. to the submicron emulsions of Tabibi et al. is that the submicron emulsions of Tabibi et al. contain a surfactant.

Regarding the amount of surfactant as recited in the instant claims 25 and 27-28, it is noted that Tabibi et al. teach submicron emulsions of adsorptive oils contain surfactants but the concentration of such surfactants were not disclosed (column 6,

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lines 58-59 and 62). Thus Tabibi et al. do teach the presence of a surfactant, which closely meets the amount of surfactant set forth in instant claims 25 and 27-28. It is considered that one of ordinary skill in the art at the time the invention was made would have found it obvious to vary and/or optimize the amount of surfactant provided in a composition, according to the guidance set forth in Tabibi et al., to provide a composition having desired amount of surfactant. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 223, 235 (CCPA 1955).

Regarding the ratio by weight of the amount of oily phase to the amount of surfactant as recited in instant claim 28, Ribier et al. teach the amount of oil ranges from 5 to 30% by weight with respect to the total weight of the emulsion (column 3, lines 16-18). Tabibi et al. teach submicron emulsions of adsorptive oils contain surfactants but the concentration of such surfactants was not disclosed (column 6, lines 58-59 and 62). Since Ribier et al. teach the amount of oil ranges from 5 to 30% by weight and Tabibi et al. teach the presence of surfactants, it would be obvious that the amount of surfactant present may yield a ratio of amount of oily phase to the amount of surfactant of 3 to 6 as recited in instant claim 28.

However, Kenji et al. specifically teach effect of adding amphiphilic solubilization improver, sucrose distearate on the solubilization capacity of nonionic microemulsions. (title and whole article). It would have been obvious to one of ordinary skilled in the art at the time the instant invention was made to incorporate specific surfactant in the

teachings of combination of references and come to the claimed invention because it helps in solubilization, with a reasonable expectation of success.

Response to Arguments

6. Applicant's arguments with respect to claims 25-43 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Snigdha Maewall whose telephone number is (571)-272-6197. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-0580. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Snigdha Maewall/
Examiner, Art Unit 1612

/Gollamudi S Kishore, Ph.D/
Primary Examiner, Art Unit 1612